

Amendments to the Specification:

Please replace paragraph [0014] with the following amended paragraph:

[0014] The present invention will become more fully understood from the detailed description given here below, the appended claims, and the accompanying drawings in which[[:]]:

Please replace paragraph [0017] with the following amended paragraph:

[0017] FIG. 2A is an enlarged schematic cross-sectional illustration of Sectional Area A of FIG. 2;

Please replace paragraph [0018] with the following amended paragraph:

[0018] FIG. 3 is an enlarged schematic cross-sectional illustration of the damping mechanism of the MR fluid damper of FIG. 2;

Please replace paragraph [0020] with the following amended paragraph:

[0020] FIG. 5 is a schematic cross-sectional illustration of a third embodiment of a damping mechanism of an MR fluid damper of the present invention; [[and]]

Please replace paragraph [0021] with the following amended paragraph:

[0021] FIG. 6 is a schematic cross-sectional illustration of another embodiment of an MR fluid damper of the present invention[[:]]:

Please replace paragraph [0022] with the following amended paragraph:

[0022] FIG. 7 is a schematic cross-sectional illustration of the MR fluid damper of FIG. 6 taken along Section 7-7[.]; and

Please add the following new paragraph after paragraph [0022]:

[0022.1] FIG. 8 is an enlarged schematic cross-sectional illustration of the damping mechanism of FIG. 2 modified to exemplify adaptation to electrorheological fluids.

Please replace paragraph [0023] with the following amended paragraph:

[0023] Referring to FIGS. [[2-7]]2-8, this invention may be described generally as a damping apparatus 100 which includes linear to rotary conversion mechanism 102 for converting linear motion and forces applied to damping apparatus to rotary movement and forces which may be damped by operation of damping mechanism 104. In a vehicular application, damping apparatus 100 may be incorporated into the suspension system as a shock absorber in the spring mass system comprising the vehicle chassis and other sprung masses and the wheels and other unsprung masses. In such systems, the linear motion and force inputs occur as the vehicle is driven and the wheel experiences movement relative to the chassis, such as, for example, those caused by variations in the surface that the vehicle is driven on or objects in the path of the wheel.

Please replace paragraph [0038] with the following amended paragraph:

[0038] Fluid 160 may comprise any fluid having a viscosity that may be varied by application of an electromagnetic field. Fluid is preferably a MR fluid or an electrorheological (ER) fluid, and most preferably a magnetorheological fluid. Electrorheological (ER) fluids are suspensions consisting of extremely fine dielectric particles of sizes ranging from about 0.1-100 μ m in a non-conducting fluid base. The apparent viscosity of these fluids changes reversibly in response to an electric field. For instance, a typical ER fluid can go from the consistency of a liquid to that of a gel, and back, with response times on the order of milliseconds. The change in viscosity is proportional to the applied potential and the properties of the dielectric base fluid. Since the dielectric constant of suspensions particles is larger than the dielectric constant of the base fluid, application of an external electric field polarizes particles. Polarized particles interact and form chain-like or even lattice-like organized structures. Simultaneously, the rheological properties of the suspension change and the viscosity of the fluid increases. Referring to FIGS. 2-7, it is believed that ER fluids may also be used in these devices with the following modifications as exemplified in FIG. 8. The coils shown in these figures 2-7 should be replaced by a pair of electrodes 157A and 157B that are placed on opposite sides of channel 176. Electrodes should be attached to a variable voltage source that is adapted to energize electrodes and generate a variable electric field 159 within channel 176. In the embodiments shown, the first electrode 157A may be substituted for coil 200. The second electrode 157B should be placed opposite the first electrode and across channel 176 and may be incorporated into either of sidewall 170 or hub 154, depending on the configuration of first electrode.